

### **REMARKS**

The Office Action of July 10, 2009 has been reviewed and the Examiner's comments carefully considered. Claims 21 and 23-30 are pending in this application. Claims 21 and 30 have been amended herewith in accordance with the originally filed specification. No new matter has been added. Accordingly, claims 21 and 23-30 remain in this application and claims 21 and 30 are in independent form.

Support for the amendments to claim 21 can be found, *inter alia*, at page 2, lines 35-37, of the originally filed application. Support for the amendments to claim 30 can be found, *inter alia*, at page 6, lines 1-9, 12-14, and 26-28, page 7, lines 31-32, and page 8, lines 7-8 of the originally filed application.

### **35 U.S.C. §102 Rejections**

Claims 21 and 23-29 stand rejected under 35 U.S.C. §102(b) for asserted anticipation by WO 99/33355 to Sawatzki et al. (hereinafter "Sawatzki"). On July 30, 2009, the Examiner telephonically confirmed with Patricia A. Olosky, an attorney of Applicants, that the rejection of claim 30 under 35 U.S.C. §102(b) was an inadvertent error. Reconsideration and withdrawal of the rejections of claims 21 and 23-29 are respectfully requested.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Brothers Inc. v. Union Oil Company of California*, 814 F.2d 628, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Sawatzki discloses an oil, fat and/or lecithin-based fat blend containing polyunsaturated fatty acids, wherein the lecithin content amounts to up to 40 wt.% of total lipids (i.e., the sum of oils, fats and lecithins), and the lecithin may be lecithin isolated from egg yolk (see abstract, page 6, lines 20-22 and page 7, lines 24-26). The fat blend described by Sawatzki may be incorporated into a dietetic or a pharmaceutical product including a fat emulsion, a convenience food, a liquid food, a reconstituted powder food or a reconstitutable powder food (see page 11, lines 1-12).

In contrast, the solid fat product of the present invention is a product prepared from whole egg or egg yolk by specifically separating only the egg oil (which, as defined on

page 6, lines 4-8 of the application as filed, is the triglyceride fraction) from the whole egg or egg yolk and replacing the removed egg oil (i.e., the triglycerides) with a fat or oil component containing triglycerides and/or phospholipids of long-chain polyunsaturated fatty acids having at least 20 carbon atoms (hereinafter “LC-PUFAs”) (such as fish oil, marine animal oil, marine mammal oils, bacterial oils, algal oils, fungal oils, or single-cell oils; see page 4, lines 16-19 of the application as filed) in an amount to result in a proportion of LC-PUFAs of more than 5 wt.% of the total fatty acid content. In other words, the egg phospholipids and egg non-fat components are not removed and remain within the solid fat product. The thus produced solid fat product is therefore “based on whole egg or egg yolk”, i.e., includes a fat or oil component containing phospholipids originating from whole egg or egg yolk, and a non-fat component consisting essentially of whole egg or egg yolk constituents.

Sawatzki does not teach a solid fat product based on whole egg or egg yolk as presently claimed, but concerns fat or oil blends suitable for use in dietetic or pharmaceutical products. There is no disclosure in Sawatzki of a solid fat product that is prepared from whole egg or egg yolk and is thus based on whole egg or egg yolk, i.e., includes a fat or oil component and a non-fat component consisting essentially of whole egg or egg yolk constituents. Thus, it is submitted that Sawatzki fails to anticipate the solid fat product according to amended claim 21.

In light of the foregoing claim amendments and remarks contained herein, reconsideration of the rejection and allowance of claim 21 are respectfully requested. Claims 23-29 depend directly from and add further limitations to claim 21. Thus, reconsideration of the rejections and allowance of claims 23-29 are also respectfully requested.

### **35 U.S.C. §103 Rejection**

Claim 30 stands rejected under 35 U.S.C. §103(a) for asserted obviousness over the teachings of U.S. Patent No. 3,881,034 to Levin (hereinafter “Levin”) in view of Sawatzki and further in view of U.S. Patent No. 5,302,405 to Hsieh et al. (hereinafter “Hsieh”).

As reiterated by the Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 U.S.P.Q.2d 1385 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. §103 is stated in *Graham v. John Deere*. Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in

KSR International Co. v. Teleflex Inc., 72 Fed. Reg., No. 195 (October 10, 2007) at page 57527 (hereinafter “Examination Guidelines”). The factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

Examination Guidelines at page 57527.

“The ultimate determination of patentability must be based on consideration of the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence.” Manual of Patent Examining Procedure, (Sept. 2007) §716.01(d) and In re Oetiker, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

Levin discloses the preparation of a dried fat-free egg powder (see abstract and column 1, lines 37-52, and the drawing figure), a dried egg powder in which the removed egg fat is partly replaced by the addition of egg fat (see abstract, column 1, lines 18-24, column 2, lines 7-10, and the drawing figure), and a dried reconstituted egg powder in which the removed egg fat is replaced with various edible materials, especially cholesterol-free edible fats and oils and flavoring compounds with or without fat or oils (see column 1, lines 25-26, column 2, lines 35-41, and the drawing figure). The process for preparing these egg products always involves the step of defatting whole eggs by extracting the fat into an organic solvent, followed by draining or filtering off the fat-containing solvent to obtain a dried fat-free egg product (see abstract, column 1, lines 44-49, and the drawing figure). The organic solvent used may be a halogenated hydrocarbon, in particular ethylene dichloride, or an alcohol (see column 3, lines 13-16).

As is well-known in the art, the solvent extraction method, described by Levin, results in the removal of both triglycerides (i.e., “egg oil” within the meaning of the present application) and phospholipids. In contrast, the presently claimed method concerns a method in which only the egg oil (the term “egg oil”, as used in the present application, refers only to the triglycerides, rather than to all lipids of egg yolk (see page 6, lines 4-8 of the application as filed)) is separated and replaced by a LC-PUFA containing fat or oil, whereas the phospholipids are not removed from the whole egg or egg yolk.

Moreover, the term “egg oil” mentioned in column 2, lines 35-50 and in Example 8, and the term “egg fat” are interchangeably or synonymously used in Levin. Thus, the term “egg oil”, as used in Levin, does not mean triglycerides and, consequently, Levin neither discloses nor suggests to one skilled in the art that “egg oil” within the meaning of the present invention (i.e., triglycerides) is removed from the egg, contrary to the opinion of the Examiner (point 6. b., last three lines of page 5 and first two lines of page 6 of the Office Action).

It should also be noted that Levin discloses that the described “fat-free” products have less than 5% free egg fat by weight. However, the amount of phospholipids and triglycerides in egg yolk is about 9% and 20% on a dry basis, respectively, (see the attached excerpts from the textbook “Egg Bioscience and Biotechnology”, page 41 and page 192). This means that the solvent extraction method used in Levin must inevitably result in the removal of at least part of the phospholipids (even if 100% of the triglycerides were removed which, however, is not the case) to obtain a product with a residual fat content of less than 5%. Consequently, the process used in Levin to produce egg products is distinctly different from the process as claimed, where the phospholipids are not removed.

In addition, Levin also fails to disclose that the removed triglyceride fraction is replaced by a LC-PUFA containing fat or oil so as to result in an amount of LC-PUFAs in the fat or oil component of the solid fat product of more than 5 wt.% of the total fatty acid content.

Furthermore, it should be noted that it is not true that Levin discloses “maintaining the bound fat in the product but being substantially free of fat (cholesterol) (column 1, lines 56-60”, as alleged by the Examiner (see point 6. b. of the Office Action). Rather, the cited passage merely discloses that residual fat that has not been removed by the solvent extraction process remains in the final dried egg product, whereas the cholesterol is essentially in the separated (free) egg fat.

In addition, contrary to the opinion of the Examiner (see point 6. b. of the Office Action), the “bound fat” mentioned in column 1, line 58 of Levin does not mean egg components such as phospholipids and lipoprotein complexes, but merely refers to residual (egg) fat which remains in the product after the solvent extraction and which includes triglycerides and

phospholipids. In other words, the term "bound fat" within the meaning of Levin is different from the meaning of "bound fat" according to Hsieh (see column 3, lines 28-30).

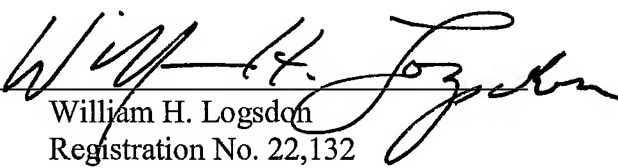
Sawatzki and Hsieh do not cure the deficiencies of Levin, as both these references fail to disclose or suggest the step of separating only the triglycerides (i.e., the egg oil) from whole egg or egg yolk and replacing the separated triglycerides with a fat or oil component containing triglycerides and/or phospholipids of LC-PUFAs.

In light of the foregoing claim amendments and remarks contained herein, it is respectfully asserted that none of the prior art references cited by the Examiner, alone or in combination, teaches, discloses, or suggests the claimed subject matter of the present invention in independent claim 30. As such, Applicants assert that independent claim 30 is patentable over the prior art of record. Reconsideration of the rejection and allowance of amended independent claim 30 are respectfully requested.

#### **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that all of pending claims 21 and 23-30 in the present application are distinguishable from the cited prior art. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

Respectfully submitted,  
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